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Ministry of Energy
Publications

BEFORE THE NATIONAL ENERGY BOARD

[G-1]

IN THE MATTER OF the National Energy Board
Act and the Regulations made thereunder

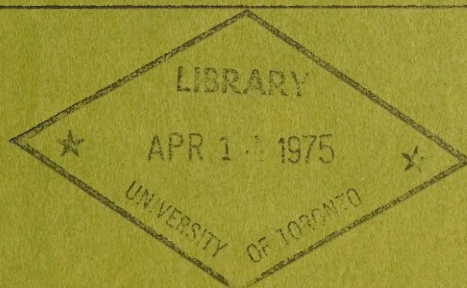
- and -

IN THE MATTER OF an Application by Interprovincial
Pipe Line Limited for a Certificate of Public
Convenience and Necessity to Construct a Pipe Line
Extension from Sarnia, Ontario to Montreal, Quebec



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SUBMISSION OF THE
MINISTER OF ENERGY FOR ONTARIO,
AN INTERVENOR



Robin Scott, Q.C.
Ministry of Energy
12th Floor
56 Wellesley Street West
Toronto, Ontario

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1. The Minister of Energy for Ontario, hereinafter called "the Minister", hereby appears and intervenes in the above application, reserving the right to file material, adduce evidence, make argument and submissions and to participate in the hearing as circumstances may require and the Board permit.
2. It is intended that the proposed pipeline will travel some 450 miles through the Province of Ontario, hereinafter called "Ontario" and, accordingly, Ontario has a direct interest in the selection of the route and the method of construction as it affects environmental, agricultural, resource and financial considerations within the Province.
3. Ontario supports the adoption of a National Energy Policy for Canada and recognizes that it is in the national interest and more particularly in the interests of Quebec and the Maritime Provinces to extend an oil pipeline to Eastern Canada.
4. While supporting the extension of the pipeline, Ontario urges that the possible adverse effects on the Province be minimized.

ROUTE

5. It is Ontario policy that construction of new utility lines follow existing utility corridors insofar as that is practicable and the Minister generally supports Interprovincial Pipe Line Limited, hereinafter called "the Applicant", in adopting that principle in this application.

6. However, a new planning project known as the North Pickering Project (hereinafter called "the Project") has been initiated by Ontario.

7. The Ontario Hydro right of way, which it appears the Applicant proposed to follow, passes directly through the property covered by the Project and has been expropriated by Ontario in that area.

8. The Project is presently in the preliminary stages of planning and it is impossible accurately to assess the adverse impact of the presence of a 30 inch oil pipeline through the Project area.

9. Nevertheless, although the presence of the pipeline will be disruptive to the planning process and may cause substantial and costly problems during the later stages of development, Ontario is prepared to negotiate a right of way agreement with the Applicant through the Project on the expropriated Ontario Hydro right of way if the Board determines that it is in the national interest to follow that route. However Ontario will insist that suitable terms be negotiated in consideration of the easement, including an undertaking by the Applicant to assume all future additional costs caused by the presence of the pipeline including those costs associated with line crossings and other construction.

10. In considering route selection due regard must be had for agricultural, resource and environmental factors. Ontario has prepared guidelines which are to some extent based on those prepared by the National Energy Board which have at the request of the Board been filed by the Applicant as part of

its submission. Ontario's guidelines are attached hereto as Appendix A and it is submitted that the Applicant ought to undertake to follow the Ontario guidelines which provide the minimum criteria which should be met, and further, that the certificate be granted only upon the condition of compliance with this undertaking.

AGRICULTURAL

11. The proposed route passes through substantial and important producing farm land and will affect the productivity of the land during construction and perhaps thereafter. It is of major importance to Ontario that the productivity of its valuable agricultural lands be preserved and that any adverse effects of the proposed extension be absolutely minimized.

12. It is also of major importance that the rights of land owners be vigorously defended. Accordingly the Board should, within the scope of its general powers pursuant to the National Energy Board Act assert full responsibility for ensuring that the Applicant deals with land owners openly and fairly and should require the Applicant to review its standards of compensation to ensure that adequate compensation is offered for easements, rights of way and temporary working rights.

13. Ontario urges the Board to provide that all agreements with land owners for easements, rights of way or temporary working rights contain standard conditions. These should apply in the absence of express agreement with the

land owner to the contrary.

For these purposes, Ontario submits that the Board should require by an appropriate term or condition of any certificate granted that the terms and conditions attached hereto as Appendix B be incorporated as express terms in all agreements for easements, rights of way and temporary working rights. Alternatively it is submitted that the Board should hear evidence in these proceedings by way of review of the form of agreement used by the Applicant and withhold its approval of the requested certificate until satisfactory provisions are incorporated therein.

Further:

- (a) Full disclosure respecting the location of the pipeline easement should be made by the applicant to any land owner whose land is to be crossed before entering into any agreement, and each agreement should provide for minimum disturbance of agricultural use and ensure that the land will be restored to its original state;
- (b) Each such agreement should provide for the construction of one line of pipe only.

ENVIRONMENTAL AND RESOURCE CONSIDERATIONS

14. It is imperative that the environment of Ontario be protected both during and after construction and that extensive safeguards be developed and vigorously enforced. To assist the Applicant in isolating and identifying sensitive areas of concern in this regard, attached as Appendix C is a list prepared by Ontario. The list is illustrative only and

is not in any way intended to be exhaustive or to diminish the Applicant's responsibility to investigate fully the problems which may be caused by the construction and the procedures necessary to restore the land to its natural state. Further, the Applicant must take into consideration the effect of construction on areas not in the immediate path of the pipeline.

15. During construction the Applicant must take stringent precautions to preserve the natural beauty of the landscape and to minimize disruption of the natural order. Local areas of particular natural value must be avoided where possible and the Applicant should co-operate with local groups and associations in resolving environmental problems where they arise.

16. It is strongly suggested that construction crews be educated with respect to environmental concerns and that specific instruction and supervision be given concerning environmental protection procedures at various sensitive areas along the route.

17. Ontario is concerned about the hazards of river crossings and submits that extensive consideration be given to scheduling so that crossings can be made at the least harmful times.

18. It is suggested that specific and detailed studies be undertaken in the areas listed below prior to construction and that adequate methods, acceptable to the Board, be developed to alleviate any problems that may be revealed:

- (1) Identification of sensitive marine clays;
- (2) Identification of ground water problems;

- (3) Identification of unique and special interest areas;
- (4) Identification of timing constraints for water course crossings;
- (5) Detailed study of proposed Niagara Escarpment restoration;
- (6) Summary of water uses and users along route;
- (7) Study of specific wild life and aquatic habitats along route before and after construction;
- (8) Mitigation procedures through recreational areas;
- (9) Any additional studies required as a result of problems identified in the above studies.

19. Ontario submits that the Applicant should be responsible for reviewing subsequent to construction the effect that the construction has had on the land and the effectiveness of the repair procedures it has undertaken. It should report the results of this review to Ontario.

20. The proposed line runs through some of the most beautiful areas of Ontario which the Government of Ontario is dedicated to preserving in its natural state. In this regard large sums have been and are being spent in protecting and improving the natural resources of the Province.

21. It is of particular interest to Ontario that its fish, fowl and wildlife be energetically protected and that

their natural habitat not be disturbed unduly by construction of the line.

22. It is essential that proposed methods of construction be reviewed by the Board to ensure that damage is minimal and the restoration of the areas affected is complete.

23. As indicated in Paragraph 10 hereof, Ontario has developed guidelines which provide minimum standards of agricultural, environmental and natural resource protection and which include a list of material which should be filed before the granting of a certificate. (Attached as Appendix A). It is submitted that the Board require compliance with these guidelines as a term or condition of any approval that may be given.

24. In many of the areas of special importance referred to above, Ontario considers that certain technical standards should be followed:-

- (1) The wall thickness of pipe under all water courses crossed by the line should be at least 0.500 inches;
- (2) Block valves should be installed along the route in accordance with the American National Standard for Liquid Petroleum Transportation Piping Systems B31-4 - 434-15-2 (Proposed);
- (3) Such block valves and other motorised or remotely controlled block valves should be installed in a location acceptable to Ontario;
- (4) The general principles of the depth of cover over the line should be in accordance with the American National Standard for Liquid

Petroleum Transportation Piping Systems

B31-4-434-6 except in areas where drainage is or may be critical;

- (5) Markers should be located not only at highways, fence lines, etc. but also where it might be important to ploughing operations for deep drainage or telephone cables;
- (6) Ontario should be advised of the procedures for final testing of the line and a Provincial Inspector should be present during the test;
- (7) During the operation of the line in Ontario, all leaks should be reported to Ontario as well as to the National Energy Board. The leak history of all National Energy Board Lines in Ontario should be available to Ontario on request;
- (8) If it is intended that now or in the future the line will also carry Liquid Petroleum Gases, then the design should incorporate the following special provisions in addition to the Canadian Standards Association (CSA) Code Z183:
 - (a) Block valves should be installed in accordance with the provisions of the gas code CSA Z-184-6-9-1-1;
 - (b) Remotely controlled valves should be installed as per CSA-Z-183-3-1-2-4-3

and as specified in the American
National Standard for Liquid
Petroleum Piping Systems B31.4-15-2
(Proposed);

- (c) The approved working pressures shall
be in accordance with the provisions
of the gas code CSA Z 184.

Alternatively, it is requested that a
further hearing be held by the Board
to determine safe working pressures and
other safety features if at some later
date the Applicant proposes to move
Liquid Petroleum Gases through the line.

INSPECTION

25. Ontario believes that the inspection procedures
previously followed by the Board to be inadequate in the present
case because of the particular beauty and fragility of the area
to be traversed by the pipe line in Ontario and because of its
recreational and resource importance.

26. It is submitted that a special team of inspectors
be recruited and trained to ensure that the public interest of
the people of Ontario is properly considered and protected.

27. As the environmental, resource and agricultural
concerns above mentioned are of particular importance to Ontario,
it is proposed that Ontario make available at provincial expense,
qualified persons to be seconded to the National Energy Board

to supplement the inspection staff of the Board under the direction of the Board.

28. Alternatively, it is suggested that the additional inspectors be appointed by the National Energy Board after prior consultation with Ontario.

29. Ontario is prepared to make available to the Board's inspectors in each area lists of names and telephone numbers of suitable Provincial experts who would be available for consultation on short notice.

FINANCIAL CONSIDERATIONS

30. The proposed pipe line extension to Montreal is recognized as being for purposes of the national interest and more specifically for certain advantages to Quebec and the Maritime Provinces.

31. Ontario is seriously concerned that if the line is not properly financed, the burden of under utilization in the future might fall on Ontario.

32. Ontario submits that the costs of building and operating the extension be segregated in accordance with the normal procedures of the Board so that the costs of the extension can be properly evaluated in the future and that such information be available to Ontario on request.

33. Ontario submits that the Board should insist that the project be self-supporting and self-sufficient and that the

Applicant arrange its financing and rate schedules so that Ontario is protected against any undue subsidy that might arise in the future.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

D. H. Rogers.
of Counsel for the Minister

APPENDIX A

ENVIRONMENTAL, AGRICULTURAL AND RESOURCE GUIDELINES FOR THE CONSTRUCTION AND OPERATION OF THE INTERPROVINCIAL PIPE LINE LTD. PIPELINE IN ONTARIO.

Preamble:

These guidelines have been prepared to assist in the review of the Interprovincial Pipelines Ltd. application to construct a pipeline. They reflect the concern of the Province for the safety of its citizens and their property, for the protection of the environment and of natural and agricultural resources and for the interference with the development of industries, cities and municipalities, highways, etc., in the best interest of the Province.

PART I - Data Filed

1. The Applicant should prepare and prefile with the National Energy Board, Topographic Maps or air photo mosaics of 1:50,000 or larger scale containing all topographic information and showing:
 - i) route location
 - ii) pump station (s), tankage, and valve (s) location
 - iii) all important floral and faunal areas traversed by or adjacent to, the proposed route
 - iv) all recreation areas traversed by or adjacent to, the proposed route
 - V) the distribution of present land use for a corridor within the possible zone of influence on either side of the proposed pipe line location, using the following classification:
 - a) Agriculture, such as:
 - crops
 - dairying - mixed farming
 - grazing - livestock
 - poultry
 - orchards
 - b) Forest Resources, such as:
 - forests and woodlots
 - shelter and other protection belts
 - seed production stands
 - agreement forests
 - forest lands managed in conjunction with a public agency.

- c) Mineral Resources, such as:
 - existing and potential oil and gas pools
 - existing and potential pits and quarries
 - other known important mineral deposits
- d) Crown Reserves, Crown Lands, special agreement lands and lands owned or held by quasi public agencies, such as:
 - fish sanctuaries
 - wildlife management areas
 - provincial parks and reserves or national parks
 - ecological reserves
 - areas administered by Conservation Authorities
- e) Urban, such as:
 - residential
 - commercial
 - industrial
 - recreational and open space
 - institutional
- f) Municipal and Rural Water Supply, such as:
 - sources, e.g. reservoirs, watercourses, recharge areas
 - intake and discharge points.
- g) Sites, Areas, Buildings or Structures of Archeological, Historical or Architectural significance
- vi) the geographical distribution of existing and potential physical hazards and constraints such as, but not limited to, landslides, mudflows, avalanches, earthquakes, fire risks, slope stability, marshes and organic soils.

2. The Applicant should prefile with the National Energy Board:

- i) general construction methods and, methods of minimizing damage and rehabilitation of the right-of-way, including:
 - a) methods of maintaining slope stability;
 - b) methods of construction of permanent facilities in a way that will harmonize with their natural setting;
 - c) plans to carry out assisted revegetation or alternative methods of providing an insulative cover on which natural vegetation can occur;
 - d) the plant material to be used to re-establish vegetation;

- ii) the location of any new access roads to the right-of-way which will be cleared by the Applicant and any planned deviation or expansion of the right-of-way for work camps, storage, etc.
 - iii) the location of shallow wells in or near the right-of-way, particularly if trenching is deeper than 6 to 7 feet. In the event of water supply interference due to construction, the contractor is liable for the restoration of the supply.
 - v) schedule, detailing the proposed timing of construction.
 - vi) the proposed location of any other special design and construction features to minimize damage to sensitive areas.
3. The Company should detail how construction crews are to be educated as to the environmental and agricultural concerns of the Province and what precautions will be taken to ensure that the concerns are followed.

PART II - Routing

A. Forests

- 1. The routing should avoid cutting through seed production stands.
- 2. The routing should avoid cutting through Ministry of Natural Resources designated forest areas, e.g. defined parts of agreement forests.
- 3. The routing should follow wherever possible, the interface between woodlands and cleared lands.

B. Wildlife

- 1. The habitat of rare or endangered species must not be disturbed.
- 2. The Applicant should avoid construction through present deer yards.
- 3. The Applicant should protect wetland areas used as feeding, breeding or staging areas by migratory water fowl or as a habitat for fur bearers.

C. Watercourse Crossings

- 1. The pipeline right of way should be a minimum of 1,000 feet from the shoreline of any lake designated by the Ministry of Natural Resources.

2. Pipes should not be laid parallel to streams within a distance of 50 feet of the bank of the waterway. Within the "leave strip" between the right-of-way and the watercourse, trees and vegetation should be left in their natural condition.
3. The location of any watercourse crossings to be used by motorized vehicles (excluding boats) and the frequency of use, must be approved.
4. Such environmental analyses as the Applicant carried out should note species, spawning times and locations of spawning for each watercourse. Where possible, the Applicant shall avoid known fish spawning areas.

D. Notice to Landowners

The Applicant must ensure that the landowner has sufficient advance notice of the exact routing of the pipeline and the land required so that the landowner can assess the consequences of the pipeline construction before any request is tendered for the landowner's signature for an option, or agreement for right of way and easement, or temporary working rights.

E. Parks, Parks Reserves and Areas of Outdoor Recreation

1. No pipelines shall pass through any class of Provincial Park or Park Reserve, or Corresponding Park Zones without the approval of the Ministry of Natural Resources which may except:
 - (a) Access, Recreation or Development Zones of Recreation class parks;
 - (b) existing pipeline, hydro, or service rights-of-way can be used without further widening of the right-of-way or clearing or other undesirable disturbance or any land outside of the existing right-of-way.
2. Areas designated by the Province as having important natural, historical or archaeological value should be avoided.
3. Areas of important recreation potential should be avoided unless it can be proven to the Province to be feasible or seriously impractical to do so.

H. Minerals

Pits, quarries, mineral deposits including oil and gas fields and storage pools, are to be avoided, except where the applicant has reached an agreement with the Ministry of Natural Resources.

PART III - Construction

A. Scheduling

A finalized schedule of construction for each "spread" should be made available to interested parties after the National Energy Board Order has been issued and prior to the commencement of any construction.

B. Equipment Fueling

Refueling and maintenance should be carried out in approved areas and in such a manner as to avoid infiltration to the water table or runoff into watercourses.

C. Forests

1. When passing through woodlots or forests, a designated maximum slash width must be agreed to prior to commencing construction in that particular location.
2. Merchantable timber, removed in preparation of a right-of-way, must be cut in standard lengths and piled in locations from which it can be hauled readily unless other prior arrangements are made with the owner.
3. All slash material should be chipped and/or otherwise disposed of as agreed, **unless** it is agreed that burning is necessary.
4. If burning of slash is required, approval of Ministry of Environment must be obtained and where necessary, local authorities contacted and their compliance received.
5. Under the Forest Fires Prevention Act (Revised Statutes of Ontario) no burning may take place in the designated fire districts between April 1 and October 31 except under authority of a burning permit obtained from the Ministry of Natural Resources.

6. The procedures for the road clearing slash disposal and cutting of timber will be identical with those for the pipeline right-of way.
7. The Applicant will be required to obtain a work permit under the Forest Fires Prevention Act, Revised Statutes of Ontario, in the Fire Districts designated in this Act, south of latitude of 54⁰ North from each Ministry of Natural Resources District concerned, for clearing of the right-of-way and construction of the pipeline.
8. Where Crown land is involved, no disposal of materials adjacent to the pipeline right-of-way will be permitted unless approved by the District Manager (Ministry of Natural Resources)

D. Wildlife

1. Present or potential high quality wildlife management areas should not be permanently interfered with by pipeline construction or operation.
2. For the protection of food supplies for wildlife the Ministry of Natural Resources may designate some areas of grasses, forbs and shrubs to be avoided by construction machinery or equipment storage.

E. Roads, Camps and Soil Replacement

1. When removing stumps during the right-of-way clearing, unnecessary removal of topsoil must be avoided to the satisfaction of the approved inspector.
2. During the backfilling and clean-up operations, the surface layer of soil must be replaced to the satisfaction of the approved inspector.
3. All debris resulting from the pipeline construction shall be disposed of by the Applicant to the satisfaction of the approved inspector or the landowner.
4. In the Ministry of Natural Resources' Fire Districts, the construction of all permanent and/or temporary roads and camps located off the right-of-way must be authorized south of latitude of 54⁰ North by a separate work permit under the Forest Fires Prevention Act (Revised Statutes of Ontario) obtained from the District Manager. A land use or other tenure document under The Public Lands Act (Revised Statutes of Ontario) is required for all camps or improvements of Crown lands.

5. Any temporary access road, camp or storage area not required after construction is to be closed at the expense of the Applicant, unless otherwise agreed, and returned to a condition as specified.
6. The Applicant shall be responsible for all additional costs of reconstructing the pipeline to conform to the requirements for all present and future crossings which are on Crown or public lands being managed under agreement with the Province of Ontario. (1)
7. The Company must comply with the provisions of the Ontario Water Resources Act (Revised Statutes of Ontario) and/or the Environmental Protection Act (Revised Statutes of Ontario). with respect to disposal of gaseous, liquid and solid wastes produced as a result of construction operations.

F. Watercourse Crossing

1. An approved inspector must be informed of the particular schedule for each crossing and has the right to be on site for the construction across any watercourse or body of water.
2. The timing of the construction must be such that there will be minimal interference with water users and uses including fish migration or spawning or disruption of the incubation period of the eggs. Such environmental analyses that the Applicant carries out should note species, spawning times and locations of spawning for each watercourse.
3. Clean, approved, granular material must be available on-site prior to trenching and must be used to cover the pipe as soon as it is laid across the watercourse.
4. There shall be no blasting in or adjacent to watercourse beds during fish migration or spawning.
5. Wherever temporary weirs and/or coffer dams are required and constructed at watercrossings to form settling basins for the control of siltation, adequate stream flow must be provided to avoid interference with downstream water uses. Settling basins shall

1. See Agreement by a Pipeline Company with a Timber Licensee under The Crown Timber Act, Section 10 of Grants of Easement - in respect of existing and future roads of a licensee.

be maintained and cleaned of silt, sand and debris as required to ensure complete control of construction siltation. In addition, these basins must be adequately protected to avoid hazard to persons.

6. Appropriate trench excavation methods must be employed to minimize materials from the pipe trench flowing into bodies of water, giving due consideration to the soil, terrain, ground cover, side slopes and weather conditions involved.
7. Gravel backfill must be avoided over long stretches of trench and perhaps restricted to excavation in the streambed itself, so as to avoid creation of an artificial drainage effect in the trench (French Drain).
8. Water to be used for testing or cleansing of the pipeline must come under the control of a permit to take water as issued by the Ministry of the Environment. This permit will detail the Permittee's responsibility for restoration of water supplies interfered with by the testing. Proposed sources which are limited in capacity or already used extensively may not be permitted for such purposes.
9. The banks of the watercourse must be stabilized upon completion of the construction to avoid erosion.
10. Final stream channel clean-up must include removal of any temporary structures, reshaping of the stream to an approved configuration, width and depth; protection of stream banks as described above; and removal of all construction material and debris as required.
11. Works relating to construction operations should be timed to avoid designated recreational lakes or rivers during peak use periods.
12. Where necessary, herring-bone berms should be used along the route of excavation to direct surface run-off away from newly consolidated areas.

13. Removal of vegetation from the slope approaches to the watercourse must be kept to the minimum necessary for construction. Areas cleared of vegetation must be revegetated as soon as seasonal conditions permit but must be stabilized during the post backfilling, pre-vegetation, period.
14. To minimize silt input into a watercourse which is to be crossed by the pipeline, the cutting of the trench at the bank of the watercourse must not be undertaken until the actual pipe-laying is to take place.
15. The trench and trench site drainage must be discharged to settling areas.
16. Aquatic plants uprooted or cut prior to, or during trenching operations must be contained and deposited on land.
17. To avoid disruption of the bed and the deposition of grease or oil in water, vehicles must not travel along the bed of a watercourse.
18. The Applicant must ensure that the pipeline is adequately weighted.
19. All pipelines, either underwater or located in areas subject to flooding, must be buried below the maximum anticipated depth of scour.

G. Agricultural Lands

1. Adequate notice of the schedule of the movement of materials and/or construction and normal maintenance and repairs should be given to the landowner and/or occupant.
2. The use of herbicides and pesticides must be co-ordinated with the landowner and/or occupant.
3. Where requested the Applicant must remove and stockpile the topsoil before trenching begins. Excess excavated material, stones, construction debris, trees and brush must be disposed of in a manner compatible with the existing land use. Where removed the topsoil must be replaced and, with the exception of land currently under cultivation, must be reseeded in a manner compatible with the soils and existing land use.

4. Construction scheduling and the selection of construction equipment and techniques which will reduce compaction should be used wherever possible. The Applicant shall be responsible for relieving compaction through the use of chisel plowing or other techniques such as selective cropping.
5. The Applicant shall be responsible for maintaining the surface contour as necessitated by settlement in subsequent years.
6. In order to minimize damage, provision should be made for surface and subsurface drainage during the construction period.
7. In determining the depth of the pipe, avoidance of present drainage and facilitation of the installation of future drainage should be taken into consideration. Depths should be noted on the formal agreement.
8. During construction the Applicant must repair and/or replace tile drainage to the satisfaction of the approved inspector. All open drains/ditches must be properly repaired utilizing appropriate soil stabilization procedures.
9. The Applicant shall be responsible for all increased costs occasioned by the location of the pipeline whenever future crossings for drains under The Drainage Act (Revised Statutes of Ontario) or private agricultural drainage works are necessary.
10. The Applicant will repair any tile drainage damaged or disrupted by construction procedures or operations connected with the pipeline as long as the pipeline is in place.
11. Point (s) of entry upon the property and access route (s) from the point of entry to the right of way and easement or temporary work area to be used during construction and normal maintenance and repair should be selected in consultation with the landowner. Repair and maintenance of the access routes during and upon completion of construction and normal maintenance and repair shall be the responsibility of the Applicant.
12. Where requested an access route must be available to the landowner to pass from one side of the right of way and easement or temporary work area during all phases of

construction so as not to inhibit normal movement of equipment or animals.

13. The Applicant should repair or replace all fences opened, removed or damaged. The Applicant should be responsible for damages to animals or property due to inadequate temporary fencing or improper repair or replacement of fencing.
14. Subject to the requirement of the Board Order with respect to the mandatory placement of markers, marker location (s) should be selected in consultation with the landowner.

H. Mineral Resources

Subject to the National Energy Board, the owner or lessee of the mines or minerals, including oil or other hydrocarbons, lying in, on or under the right-of-way may work and prospect for wells, mines or minerals.

I. Parks, Park Reserves and Areas of Outdoor Recreation

1. The Applicant constructing the pipeline should have contingency plans, approved by the Province, to deal at the earliest possible time with the discovery of natural, historical, or archaeological sites of significance during construction.
2. Subject to the requirements of the Board, pipeline markers, and any other visible features, should be located in Parks and Park Reserves with consultation with the Province.

PART IV -Operation, Maintenance and Contingency Planning Procedures

1. Before conducting any herbicide spraying project to retard vegetation on the right-of-way, the pipeline company should advise the District Manager (Ministry of Natural Resources) and/or the landowner stating the specific location of the project, that the application will be handled by license handlers, the type of chemical to be used and the method of application.

2. The District Manager (Ministry of Natural Resources) must be informed in advance of the actual spraying operation and, at his discretion, may monitor all section spraying.
3. Any use of pesticides must comply with the Pesticides Control Act (Revised Statutes of Ontario) as administered by the Ministry of the Environment.
4. An adequate screening program must be maintained so that any above ground structures, such as pump stations or valving, will be aesthetically harmonious with the local environment.
5. Adequate noise attenuation features must be used and maintained.
6. Before carrying out any pipeline cleaning operations which result in waste material requiring disposal, the company must apply for and receive written approval of the Ministry of the Environment.
7. As provided in the Energy Act (Revised Statutes of Ontario), the Applicant must prepare, prior to operation, a procedure to be followed regularly for surveying the pipeline route by air and land for early detection of leaks and right-of-way maintenance.
8. The Applicant must maintain any access roads necessary to the security of the pipeline.
9. Herbicide spraying after construction will be kept to a minimum. Planting of appropriate herbaceous shrubs may be advised by the Ministry of Natural Resources as an alternative method of right-of-way maintenance.
10. The surface of rights-of-way through Crown Parks and special agreement lands shall be managed by the Province according to the guidelines established for the zone or zones through which it passes subject to any safety requirements and regulations in this regard.
11. A comprehensive contingency plan and notice of spills as generally provided for under the Ontario Water Resources Act, Environment Protection Act and the Energy Act (all Revised Statutes of Ontario) should be prepared by the pipeline company and submitted to all relative Government Agencies. The plan should demonstrate the companies' willingness, ability and preparedness to monitor the throughput and to contain, clean-up and restore the

environment after any sort of spill or line break has occurred. In general, the plan should also show the responses to various anticipated problems or disasters and the reactive procedures and materials to meet these occurrences.

It is advised that the plan be updated as frequently as necessary and in general follow the following outline:

- (i) Contact list - to include company and government personnel to be contacted in case of spill.
- (ii) Response Plan (s) - a review of what reactions are taken upon the discovery of a spill or line break. It should include the order of telephoning and who is responsible for contacting whom.
- (iii) Equipment List - a listing of the company's own resources and additional contractors available along the pipeline route.

APPENDIX B

MINISTRY OF ENERGY

PROVINCE OF ONTARIO

SUBMISSION TO NATIONAL ENERGY BOARD

RE MONTREAL PIPELINE EXTENSION

TERMS AND CONDITIONS OF EASEMENTS

RIGHTS OF WAY, AND TEMPORARY WORKING RIGHTS

To help ensure that the interests of the Province and of the people of Ontario are properly safeguarded, the Province will request the National Energy Board to order that the following terms and conditions be made a condition of the Board Order.

A. As regards new agreements with landowners and municipalities

The following matters should be raised by the Applicant's agent with the landowner and where necessary the conditions agreed should be noted on the agreement.

1. The Applicant will have the right to construct one line of pipe only.
2. No agreement shall be legally binding unless at the time of signing the precise location of the pipeline easement/ right of way/temporary working rights over the property concerned is attached thereto and at the same time the landowner is notified of the approximate time of construction.
3. (i) The Applicant shall cut and place on the property all timber or trees of any value which are removed in the clearing of that property.
(ii) The Applicant shall:
 - (a) repair or replace all fences opened, removed or damaged.
 - (b) be responsible for damages to animals or property due to inadequate temporary fencing or improper repair or replacement of fencing.

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3. (ii) (c) provide compensation for any damage occasioned by the construction or presence of the pipeline and for any damage caused by its servants or agents or those of its contractors whether done in the course of their employment or otherwise.
- (iii) The Applicant shall dispose of excess excavated material, stones, construction debris (e.g, welding rod stubs) trees and brush;
- (iv) The Applicant undertakes at its own expense to restore the land to its original condition as far as possible and where necessary re-attend for that purpose, including:
- (a) proper tamping where drainage ditches etc. have been crossed,
 - (b) repair of slopes where erosion may occur,
 - (c) maintenance of surface contour,
 - (d) relief of the compaction of the land by means ~~for~~ chisel ploughing or selective cropping where requested by the landowner.
- (v) The Applicant will at the request of the landowner remove and replace topsoil.
- (vi) The Applicant undertakes to compensate the landowner for crop loss or other damage done during the construction year and crop loss in subsequent years due to impaired productivity.
- (vii) The Applicant will remove from the property (unless otherwise disposed of in a manner satisfactory to the landowner) clay or other materials removed in boring under roadways or other crossings.
- (viii) The Applicant shall where required provide for surface and subsurface drainage during construction and shall promptly and systematically repair all tile drains to their previous condition where such tile drains are broken or otherwise disturbed in the course of the pipeline construction, using cement pads, bagging and/or carrier pipe for drain tiles and crossings in accordance with customary good drainage construction practices. Tile ends shall not be left open overnight. Tiles which are broken by construction or machinery operation in other than the pipeline ditch itself shall also be replaced.

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4. The Applicant undertakes that it will at its own expense, take such steps as may be necessary to ensure that its pipeline does not interfere with any existing, future planned or unplanned municipal drainage systems nor with existing or future private drainage systems.

In areas where drainage ditches and tile drainage are important to the conservation and production of agricultural lands the Applicant undertakes to provide:

- (i) a minimum of four feet of cover over the said sections of pipe line at existing improved drainage ditches; and
- (ii) deeper cover, to be agreed with municipal authorities in the circumstances of each case, over the said sections of pipe line at existing unimproved drainage ditches, respectively.

Where such matters have been part of the discussions between the landowner and the Applicant leading to the granting of the easement/right of way, the proposed depth of the pipe line should be noted in the agreement.

5.
 - (i) The Applicant shall, after consultation with the landowner designate point(s) of entry upon the property and access route(s) from the point of entry to the right of way/easement/temporary work area to be used during construction and normal maintenance and repair.
 - (ii) Repair and maintenance of the access route(s) during and upon completion of construction and normal maintenance and repair shall be the responsibility of the Applicant.
 - (iii) An access route across the right-of-way/easement/temporary work area shall be provided where requested by the landowner.
6. Subject to the requirements of the Board Order, the locations of markers should be selected in consultation with the landowner and with particular reference to drainage tile, telephone cables, etc.

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- B. As regards agreement with the Province or with Public Authorities such as Municipalities, Conservation Authorities, Crown Lands, Recreational Areas, Parks, etc.
1. Unless otherwise agreed, where Her Majesty the Queen in right of Ontario or any agency thereof or any public authority constructs or causes to be constructed on Her or its behalf any tunnel, dam, highway, private road, railway, irrigation ditch, drain, drainage ditch, sewer telegraph or telephone line or a line for the transmission of hydrocarbons, power or any other substance, the Applicant will bear all costs incurred by Her Majesty the Queen in right of Ontario or the respective agency or public authority in connection with any application to the National Energy Board which may be required by law, any costs incurred by them for reinforcing a pipe line by the installation of protective devices or otherwise and any additional costs of construction occasioned by reason of the existence of the pipe line or pipe lines.
 2. The Applicant shall cause at its own expense the restoration and repair of, or otherwise take such action as may be necessary to mitigate such adverse environmental effects arising from the construction, operation and maintenance of the additional pipeline, herein referred to, as may be ordered or direct from time to time by the Board.
 3. The Applicant shall file with the Board and with the Province, its proposals to safeguard the environmental integrity of critical areas along the route such as:
 - (i) the crossings of rivers and creeks, the revegetation and stabilization of its banks, etc.,
 - (ii) the protection of fisheries, spawning beds, etc.,
 - (iii) the protection of parks and recreational areas.
- These proposals should include special construction techniques and design features where justified such as:
- (i) provision of block valves and their remote control, or thicker wall pipe or special grade steel or concrete or other protection against damage, and
 - (ii) line patrol or other methods of leak detection.

APPENDIX C.

SOME PARTICULAR SENSITIVE AREAS: SARNIA TO MONTREAL

CRUDE OIL PIPELINE

The following listing represents a summary of environmentally sensitive areas as identified by the International Biological Program, or as outlined by the Ministry of Natural Resources and Provincial Parks or Park Reserves (also identified through the Ministry of Natural Resources). The listing is not considered to be complete and will be added to as more data becomes available. The various points noted run in order commencing from Sarnia.

- (1) Mandaumin Nature Reserve
- (2) Ausable River Valley Complex
- (3) Thames River north of London
- (4) South Branch of the Thames River north of Woodstock
- (5) Brooksdale Forest
- (6) East Zorra Trail
- (7) Grand River
- (8) Dickson Wilderness Area Sand Ridge
- (9) Bannister and Wrigley Lakes
- (10) Cranberry Bog Nature Preserve
- (11) Pinehurst Lake Conservation Area Sand Ridges
- (12) Oliver's Bog
- (13) Beverly Swamp
- (14) Spencer Creek
- (15) Bronte Creek Provincial Park
- (16) Credit River
- (17) Duffin Creek
- (18) East Duffin Creek
- (19) Shoal Point Marsh
- (20) Levay's Marsh

- (21) Ontario Hospital Marsh
- (22) Thickson's Marsh
- (23) Oshawa Creek
- (24) Harmony Creek
- (25) Oshawa Second Marsh
- (26) Bowmanville Marsh and Creek
- (27) Newcastle Marsh and Wilmot Creek
- (28) Graham Creek
- (29) Willow Beach Marsh
- (30) Ganaraska River
- (31) Cold Creek Forest
- (32) Shelter Valley Creek
- (33) Pine-Oak Forest-Haldimond Township
- (34) Drewery Hill Swamp
- (35) Trillium Patch - Haldimand Township
- (36) Cramahe Hill Wildlife Area - Lower Trent Conservation Authority
- (37) Johnstown Drumlin Forest
- (38) Pancake Hill Slope Forest
- (39) Thurlow Wildlife Area - Thurlow Township
- (40) Salmon River Alvar
- (41) Thorpe-Alvar
- (42) Asselstine Alvar - Ernestown Township-Botanical
- (43) Caseys Point Park Reserve
- (44) Bell's Swamp-Kingston Township-botanical & Zoological
- (45) Gananoque National Park & Wildlife Area-Front of Leed St.
Lansdowne-Township
- (46) Fitzsimmons Mountain
- (47) Blue Mountain Park Reserve
- (48) Buells Creek Marsh

- (49) Long Sault
- (50) Cornwall Recreation Area-Cornwall Township
- (51) Charlottenburgh Crown Game Preserve-Charlottenburgh Township

*Data assembled with assistance from Parks Planning Branch,
Ministry of Natural Resources

Ministry of the Environment
February 19th, 1974.

